

element in claim 22, and hence it is believed that the Examiner's rejection thereof is believed not justified and hence should be reversed. Independent claims 1 and 21 are herein amended (claim 22 being cancelled) in part in response to the Examiner's rejection and now include the limitation presented in claim 22, that is, claims 1 and 21 now limit the linked parts of the two lead lines to be not only semicircular but bent in the same direction. With this added limitation, claims 1 and 21, are believed to be now allowable.

The Examiner's assertion in Paragraph 2 of the Official Letter that Salera's two bent portions are "in the same outward direction" is respectfully traversed because there is no one single outward direction. What are inside can move outward in a countless number of different ways such as to the left, to the right, upward, downward, etc which are not in the same direction. In Salera's example, one wire bends to the right and the other to the left. The Examiner seems to be saying that they are the same direction because they are both in the outward direction. Applicant says instead that the direction to the left and the direction to the right are NOT the same directions although they may both point outward. To the left and to the right are different outward directions, and not the same directions. In order to expedite the prosecution, however, applicant further added the limitation that the two lead lines are not only bent in the same direction but in the same direction with respect to each other. This means that these two semicircular portions are substantially parallel to each other. The bent portions of Salera curve away from each other and they are certainly not parallel. Thus, Salera's lead lines cannot be mounted as shown in Fig. 4 of the present application. Semicircular bends which can be used for mounting as shown in Fig. 4 are not obvious in view of the type of bends disclosed by Salera. It is therefore believed that amended claims 1 and 21 are now in condition for allowance.

Claims 1, 8, 21-22 and 25 were rejected under 35 U.S.C. 103 over Hofsass or Nakamura in view of Kaneko, Saito or Stross. The Examiner correctly admitted that neither Hofsass nor Nakamura disclosed a kink part and brought in Kaneko and other secondary references but these secondary references merely show bent wires and do not disclose any semi-circular kinked part near an end portion, much less a pair of wires bent in the same direction in the sense of the expression explained above. Kaneko's bent parts 8 are at most a quarter circle. A quarter circle is not semi-circular. Moreover, one of Kaneko's lead wires

4 protrudes to the left from the center while the other protrudes to the right. Applicant repeats the argument that the left and the right are different directions although they are both outward directions if seen from the space between the two portions of the wire. Fig. 4 of Saito shows one of the bends 13 going to the left and the other going to the left. Here again, applicant says that the left and the right are different directions, not the same direction although they are both bent outward. Stross' so-called kink 33 is clearly not intended to be semi-circular because if it were semi-circular the portions on both ends would be parallel to each other. Moreover, Stross' so-called kink is not proximal to any end portion of the wire and hence cannot serve the purpose of the kinked portion of the present invention. As for the "same direction" limitation, Stross shows only one of the wires with a kink. The other (on the left-hand side) in Figs. 1, 2 and 4 does not have anything to be called a kink.

Thus, these five references cannot predicate the rejection by the Examiner, no matter how they are combined.

Claims 26, 28 and 29 were rejected under 35 U.S.C. 103 over Kaneko in view of Hofsass. The Examiner identifies Kaneko's Fig. 5 as disclosing the claimed invention except the element being temperature sensing and having electrodes. This, however, is not so because claim 26 includes the limitation that the kinked part of each lead line is in the "opposite end" portion. It should be clear that this positional limitation is not a mere matter of design choice but it is so that the kinked parts can be used as shown in Fig. 4 of the present application. Kaneko shows lead lines 4 with "crimps 8" not near the opposite ends of the lead lines 4 but very close to (and adjacent to) the main body component 3. Thus, Kaneko is disclosing a structure not at all similar to what claim 26 dictates and there is no reason for Kaneko to be motivated to shift the positions of his crimps closer to the opposite ends, farther away from the main body component 3.


Claims 27 and 30-33 were rejected under 35 U.S.C. 103 over Kaneko in view of Hofsass and Clem. These claims are all dependent from claim 26 and Clem was evidently cited merely for disclosing certain materials, not for disclosing any kind of a kink. Thus, as long as claim 26 is allowable, claims 27 and 30-33 should also be deemed allowable.

It is therefore believed that the instant Amendment is responsive to the Office Action.

Attached hereto is a marked-up version of the changes made to the specification by

the current amendment. The attached page is captioned "Version with markings to show changes made."

Respectfully submitted,


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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 1, 21 and 24 have been amended as follows:

1. (Twice amended) A temperature sensor comprising:
a temperature sensing element having electrodes thereon; and
elongated electrically conductive lead lines each attached to a corresponding one of
said electrodes, said lead lines being elastic, said lead lines each having one end attached to a
corresponding one of said electrodes and including an externally exposed semicircular
kinked part proximal to the other end, said lead lines being bent in a same direction with
respect to each other to form said kinked part.

21. (Twice amended) A temperature sensor comprising:
a temperature sensing element having electrodes thereon;
elongated electrically conductive lead lines each having one end attached to a
corresponding one of said electrodes and an approximately semi-circularly formed externally
exposed kinked part proximal to the other end thereof, said lead lines being bent in a same
direction with respect to each other to form said kinked part; and
an electrically insulating cover which covers said temperature sensing element and
portions of said lead lines but leaves the kinked parts exposed.

24. (Amended) The temperature sensor of claim ~~22~~ 21 wherein said
conductive lead lines comprise a material selected from the group consisting of phosphor
bronze, german silver, beryllium, SUS, Cu-Ti alloys, brass, plated phosphor bronze, plated
german silver, plated beryllium, plated SUS, plated Cu-Ti alloys and plated brass.

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